

## Supplemental materials for

Beach M, Park J, Han D, Evans C, Moore RD, Saha S. Clinician response to patient emotion: impact on subsequent communication and visit length. *Ann Fam Med.* 2021;19(6):515-520.

<b>Supplemental Table 1. Description of Study Participants, Encounters and Emotional Expressions</b>	
<b>Clinician Characteristics (n = 41)</b>	
Age, mean (SD)	45.7 (10.3)
Gender, n (%)	
Male	14 (34.1%)
Female	27 (65.9%)
Race, n (%)	
White/Caucasian	27 (65.9%)
Black/African American	6 (14.6%)
Hispanic/Latino	2 (4.9%)
Asian	4 (9.8%)
Other	2 (4.9%)
Patients/Clinician, Mean (Range)	8.3 (2-10)
<b>Patient Characteristics (n = 342)</b>	
Age, mean (SD)	53.2 (10.2)
Gender, n (%)	
Male	218 (63.7%)
Female	124 (36.3%)
Race, n (%)	
White/Caucasian	69 (20.2%)
Black/African American	262 (76.6%)
Asian	2 (0.6%)
Other	9 (2.6%)
<b>Visit Characteristics (n = 342)</b>	
Length in minute, mean (range; SD)	30.4 (9.5-75; 11.9)

At least 1 emotional expression, n (%)	228 (66.7%)
Mean (range; SD) emotional expressions	3 (0-24; 3.7)
Mean (range; SD) emotional expressions among visits with at least 1 emotional expression	4.5 (1-24; 3.6)
<b>Emotional Expressions Characteristics (n = 1028)</b>	
Intensity, n (%) concerns	278 (27.0%)
Unique emotional expression, n (%)	524 (51.0%)
Same emotional expression repeated subsequently, n (%)	504 (49.0%)
Same emotional expression repeated subsequently after 60 seconds, n (%)	166 (32.9%)
Time of emotional expression in minutes, mean (range, SD)	10.1 (0.05-40.6; 9.2)

**Supplemental Table 2. Distribution of Clinician Responses to Patient Emotional Expressions**

Broad Response Types		Hypothetical Responses, by Type <sup>^</sup> Patient – “I’m just so lonely”	Definition	n (%)
Non-explicit - Reduces Space		“Did you get your flu shot this year” “You should join an HIV support group”	Does <u>not</u> specifically reference the patient’s emotional circumstance; does <u>not</u> provide space in the conversation for the patient to elaborate	73 (7%)
Non-explicit - Provides Space		“I’m so sorry to hear that” “Tell me more” “Mmm-hmm, I see”	Does <u>not</u> specifically reference the patient’s emotional circumstance; <u>does</u> provide space in the conversation for the patient to elaborate	504 (49%)
Explicit - Reduces Space		“You shouldn’t be lonely, you have lots of friends” “You might feel less alone if went out with friends more often”	<u>Does</u> specifically reference the patient’s emotional circumstance; does <u>not</u> provide space in the conversation for the patient to elaborate	127 (12%)
Explicit - Provides Space		“When did you start feeling lonely?” “It’s hard to be alone”	<u>Does</u> specifically reference the patient’s emotional circumstance; <u>does</u> provides space in the conversation for the patient to elaborate	324 (32%)
<b>Specific Response Types*</b>				
Provides Space	Any empathy	“I am so sorry to hear that”	Expressed explicit or non-explicit verbal empathy (NPI <sub>m</sub> , EPA <sub>Em</sub> )	51 (5%)
	Explicit focus on emotion	“It’s hard to be alone” “When did you start feeling lonely?” “I’m sorry it’s been such a hard time”	Focused explicitly on the emotion by acknowledging it, asking about it, or providing explicit empathy (EPA <sub>Ac</sub> , EPA <sub>Ex</sub> , EPA <sub>Em</sub> )	38 (4%)
	Acknowledgment	“You’ve been through so much loss” “Divorce is just so hard”	Acknowledged the emotion or circumstance (NPA <sub>c</sub> , EPC <sub>Ac</sub> , EPA <sub>Ac</sub> )	205 (20%)
	Exploring	“Tell me more about that” “When did your partner move out?”	Explored the emotional issue by asking the patient for more information (NPA <sub>i</sub> , EPC <sub>Ex</sub> , EPA <sub>Ex</sub> )	225 (22%)
	Neutral/ passive	“Mmmm-hmmm” “I see”	Was passive by giving silence, back-channeling, or providing non-explicit acknowledgment (NPS <sub>i</sub> , NPBC, NPA <sub>c</sub> )	435 (42%)
Reduces Space	Information/ advice	“You should join an HIV support group”	Gave information or advice (NRI <sub>a</sub> , ERI <sub>a</sub> )	128 (12%)
	Blocking	“Did you get your flu shot this year?” “You shouldn’t be lonely, you have lots of friends”	Actively tried to avoid the emotional expression (NRI <sub>g</sub> , NRS <sub>d</sub> , ERS <sub>w</sub> , ERA <sub>b</sub> )	66 (6%)
<sup>^</sup> Examples to demonstrate different responses, by type, to a hypothetical patient expression *Not mutually exclusive and therefore totals do not add to 100% and some examples are shown in multiple categories				

**Supplemental Table 3. Associations of Timing of Patient Emotional Expression with Clinician Responses**

Types of Clinician Response		Hypothetical Examples to patient expression "I'm just so lonely" <sup>^</sup>	Odds of Response Type* with Each Passing Minute
<b>Broad Response Types</b>			<b>OR (95%CI)</b>
<b>Non-Explicit</b> - Does not explicitly mention or repeat the emotional circumstance in response		"I'm so sorry to hear that" "Tell me more" "Mmm-hmm, I see" "Did you get your flu shot this year"	ref
<b>Explicit</b> - Does explicitly mention the emotional circumstance in response		"It's hard to be <u>alone</u> " "When did you start feeling <u>lonely</u> ?" "You might feel less <u>alone</u> if you went out with your friends more often"	<b>1.02 (1.00, 1.03)</b>
<b>Reduce space</b> for the patient to elaborate on emotional issue		"Did you get your flu shot this year" "You should join an HIV support group" "You shouldn't be lonely, you have lots of friends"	ref
<b>Provides space</b> for the patient to elaborate on emotional issue		"When did you start feeling lonely?" "It's hard to be alone" "Tell me more" "Mmm-hmm, I see"	<b>0.96 (0.94, 0.98)</b>
<b>Specific Response Types</b>		<b>Hypothetical Responses, by Type<sup>^</sup></b>	
Provides Space			
	Empathy	"I am so sorry to hear that"	0.98 (0.95, 1.02)
	Explicit focus on emotion	"It's hard to be alone" "When did you start feeling lonely?"	1.03 (1.00, 1.06)
	Acknowledgment	"You've been through so much loss" "Divorce is just so hard"	1.01 (0.99, 1.03)
	Exploring	"Tell me more about that" "When did your partner move out?"	0.99 (0.97, 1.01)
	Neutral/passive	"Mmmm-hmmm" "I see"	<b>0.98 (0.96, 0.99)</b>

Reduces Space			
	Gives advice or information	<i>“You should join an HIV support group” “I’d like to prescribe an antidepressant”</i>	<b>1.05 (1.02, 1.07)</b>
	Blocking	<i>“Did you get your flu shot this year?” “You shouldn’t be lonely, you have lots of friends”</i>	<b>1.03 (1.00, 1.05)</b>
<p><b>^Examples to demonstrate different responses, by type, to a hypothetical patient expression – “I’m just so lonely”</b>  <b>*Random intercept univariate multilevel logistic regression models (account for clustering of emotional expressions within patient encounters and of patient encounters within clinicians).</b></p>			